

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0024] in the following manner:

The ambient temperature portion 12 includes a warm end 48 of the Stirling expander 20, as ~~will~~ well as the compressor 26 and the surge volume 44. The components of the ambient temperature portion 12 may be coupled to an ambient temperature structure 52. The first-stage temperature portion 14 includes the first-stage interface 36, which may be coupled to a first-stage structure 54. The second-stage portion 16 includes the second-stage thermal interface 40, which may be coupled to a second-stage temperature structure 56. The first-stage interface 36 may be supported in a cantilevered structure by the thin-walled tube of the expansion volume 32.

Please amend paragraph [0037] in the following manner:

Fig. 9 shows another embodiment of the cryocooler 10. In the embodiment shown in Fig. 9, the inertance tube 42 is thermally coupled to the cold cylinder 69, for example by being wrapped around the cold cylinder 69. This thermal coupling between the inertance tube 42 and the cold cylinder 69 may reduce heat transfer from the warm end of the inertance tube 42 to the cold end of the inertance tube 42, which may be caused by oscillatory movement of gas in the inertance tube 42. The thermal coupling between the inertance tube 42 and the cold cylinder 69 may be accomplished by any of a variety of ways. For example, the heat sinking between the inertance tube 42 and the cold cylinder 69 may be accomplished by coupling them together at one point, at several distinct points, ~~are~~ or essentially continuously along at least part of the length of the inertance tube 42 (as with the embodiment shown in Fig. 9).